



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,063	01/11/2007	Syuuichi Ishii	284371US0PCT	3928
22850	7590	08/05/2010	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			STULII, VERA	
			ART UNIT	PAPER NUMBER
			1781	
			NOTIFICATION DATE	DELIVERY MODE
			08/05/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/564,063	Applicant(s) ISHII ET AL.	
	Examiner VERA STULII	Art Unit 1781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☒ Claim(s) 1,2 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/10/2006, 06/28/2006, 08/04/2006, 01/16/2009,</u> | 6) <input type="checkbox"/> Other: ____. |

04/13/2009

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

NOTE***: The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with idiomatic errors.

Claim 1 is objected to for the recitation of the phrase “[a] processing method of an alcoholic beverage with improved foaming properties comprising a mashing process ..., a first filtration process, ...”. Claim 2 is objected to for the recitation of the phrase “a processing method comprising a process for processing ...”. In regard to these recitations, it is noted that claims 1 and 2 recite “a processing method” comprising several other processes (mashing, filtration, boiling, fermentation, etc.) It appears that the disclosure of the invention in the specification is directed to a method for production of an alcoholic beverage including the method steps (the steps of mashing malt and adjunct to produce malt mash, filtering the mash to produce clear wort, boiling the wort, fermenting wort with yeast, filtering fermented wort), rather than separate processes. Clarification or correction is required.

Claims 1 and 2 are also objected to for the recitation of the phrase “wherein a pea protein which was extracted and was obtained from green peas is added to either each process before said second filtration process or between said each processes”.

Art Unit: 1781

First, it is not clear if the step of protein extraction is included in the process, or Applicants' intention was to refer to the protein extract obtained from the green peas. Further, it is noted that protein extract could not be added to the process, but rather to the product resulting from performing the corresponding method step (liquefied mash, clear filtered wort, fermented wort, boiled wort, etc). Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "improved" in claims 1-8 is a relative term which renders the claim indefinite. The term "improved" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The claims do not clarify as to what standard beverage is the foaming properties of beverage of claims 1-8 is being compared with. Applicant's failure to disclose a standard foaming properties or a standard beverage against which the foaming properties of beverage of claim 1-8 are being measured renders the claim indefinite. Clarification and/or correction is required.

Claim 4 is rendered indefinite for the recitation of the phrase "by fermenting a pre-fermentation liquid which created raw materials containing malts at mashing process". The meaning of this phrase is not clear. It is not clear how fermentation of a

Art Unit: 1781

pre-fermentation liquid "created raw materials containing malts at mashing process". It is not clear what are the actual method steps involved in the production of an alcoholic beverage.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu et al (US 5,387,425) in view of Boni et al (EP 962522).

In regard to claims 1 and 5, Hsu et al discloses a method for production of a fermented alcoholic malt beverage and the beverage prepared by this method (Abstract).

In regard to the "improved foaming properties" recitation in the preamble of claim 1, Hsu et al discloses addition of the "foaming proteins" to the malt beverage to enhance

Art Unit: 1781

the amount and persistence of the foam head on a fermented malt beverage (Col. 1 lines 10-14).

In regard to the method steps recited in claims 1, Hsu et al discloses:

- mashing by mixing ground malt and warm water until it forma a malt mash of a porridge-like consistency.(Col. 1 lines 10-14, 56-60);
- obtaining clear wort by removal of liquid (wort) from the insoluble husks (Col. 2 lines 9-21);
- boiling and hopping the wort (adding hops during wort boiling) (Col. 2 lines 24-34).
- fermenting boiled wort using brewers yeast (Col. 2lines 40-50).
- additional filtration steps (Col. 2 lines 65-66).
- addition of proteins before final filtration (Col. 6 lines 12-19).

In regard to the “malts and adjuncts” recitation in line 3 of claim 1, Hsu et al also discloses using adjuncts along with malts as a source of fermentable sugars (Col. 1 lines 56-60).

Hsu does not disclose that proteins are derived from peas. Boni et al discloses use of proteins in the beer production. Boni et al discloses that proteins could be obtained from various “vegetable material such as peas, beans, grains, etc. One of ordinary skill in the art would have been motivated to modify Hsu et al and to use proteins obtained from peas as disclosed by Boni et al. One of ordinary skill in the art would have been motivated to do so, since Boni et al discloses use of proteins obtained from grains in beer production and Hsu et al discloses proteins obtained from wheat and

Art Unit: 1781

barley in the beer production. Both references disclose grains as a source of vegetable protein. In addition, Boni et al discloses peas as a source of vegetable protein.

Therefore, to substitute one protein derived from plant material with another protein derived from plant material would have been obvious. One of ordinary skill in the art would have been motivated to use any variety of peas, including green peas, based on the availability, price and other factors.

Claims 2-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oono (WO 2004/000990) in view of Boni et al (EP 962522).

US 2005/0220935 is relied upon as an English translation of WO 2004/000990.

In regard to claims 2-4, Oono discloses a method for preparation of an alcoholic beverage by preparing a pre-fermentation liquid using syrup containing sources of carbon ([0014]-[0018]), nitrogen ([0019]-[0023]), hops ([0024]-[0026]), coloring matter ([0027]-[0028]), foam formation and head retention enhancing substances ([0029]-[0030]). Oono discloses fermentation of pre-fermentation liquid ([0039], [0043]) and further filtering step ([0043]). In regard to the "improved foaming properties" recitation in the preamble of claim 2, Oono discloses proteinic substances as foam formation and head retention enhancing substances. In regard to claims 6-8, Oono discloses alcoholic beverage prepared by the method described above.

Oono does not disclose proteins derived from peas. Boni et al discloses use of proteins in the beer production. Boni et al discloses that proteins could be obtained from various "vegetable material such as peas, beans, grains, etc. One of ordinary skill in the

Art Unit: 1781

art would have been motivated to modify Oono and to use proteins obtained from peas as disclosed by Boni et al. One of ordinary skill in the art would have been motivated to do so, since Boni et al discloses use of proteins in beer production and Oono et al discloses proteinic substances used in the beer production.

Claims 2-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bavisotto et al (US 3,720,517) in view of Boni et al (EP 962522).

In regard to claims 2-4, Bavisotto et al discloses preparation of an alcoholic beverage by forming a malt-based liquid containing a fermentable carbohydrate from one or more sources; a food grade material having a high soluble protein or amino acid content; malt and hops or hop extract (Col. 1 lines 35-40). Bavisotto et al discloses using malts or malt extracts along with sugars (dextrose, fructose, sucrose, etc), where malts also serve as a coloring agent (Col. 1 lines 43-45; Example 1; Claim 1). Bavisotto et al also disclose boiling malt based liquid with hops, cooling, adding yeast, fermenting, and further filtering to separate solids from a fermented mixture (Col. 1 bottom paragraph--Col. 2 top paragraph; Col. 2 bottom paragraph--Col. 3 top paragraph). In regard to the preferred food grade material having a high soluble protein or amino acid content, Bavisotto et al discloses material derived from soy beans, such as soya flakes (Col. 2 lines 11-12). In regard to claims 6-8, Bavisotto et al discloses alcoholic beverage prepared by the method described above.

Bavisotto et al does not disclose that proteins are derived from peas. Boni et al discloses use of proteins in the beer production. Boni et al discloses that proteins could be obtained from various "vegetable material such as peas, beans, grains, etc. One of

Art Unit: 1781

ordinary skill in the art would have been motivated to modify Bavisotto et al and to use proteins obtained from peas as disclosed by Boni et al. One of ordinary skill in the art would have been motivated to do so, since Boni et al discloses use of proteins obtained from grains and peas in beer production and Bavisotto et al discloses proteins obtained from soy beans in the beer production. Therefore, to substitute one protein derived from plant material with another protein derived from plant material would have been obvious. One of ordinary skill in the art would have been motivated to use any variety of peas, including green peas, based on the availability, price and other factors.

Regarding the “improved foaming properties” recitation, it is noted that although the references do not specifically disclose every possible quantification or characteristic of its product, such as foaming properties, this characteristic would have been expected to be as claimed absent any clear and convincing evidence and/or arguments to the contrary. The combination of references disclose the same starting materials and methods as instantly (both broadly and more specifically) claimed, and thus one of ordinary skill in the art would recognize that the foaming properties among many other characteristics of the product obtained by referenced method, would have been an inherent result of the process disclosed therein. The Patent Office does not possess the facilities to make and test the referenced method and product obtain by such method, and as reasonable reading of the teachings of the references has been applied to establish the case of obviousness, the burden thus shifts to applicant to demonstrate otherwise.

Art Unit: 1781

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VERA STULII whose telephone number is (571)272-3221. The examiner can normally be reached on 7:00 am-3:30 pm, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vera Stulii/
Examiner, Art Unit 1781